

Finding a Balance for Success:

Student Success Innovations vs. Faculty Workload Concerns

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Abstract—Researchers at a public (state funded) institution in the United States seek to increase student success rates in online courses by encouraging faculty implementation of research-based strategies in their online courses without significantly increasing faculty workloads. The researchers created a program that provided short, research-based, student-success strategy segments to faculty already enrolled in faculty development. These teaching tools were largely based on pedagogical research and methods long understood within traditional education disciplines, but not as obviously applied to online course delivery. In this sense, the professional development modules are innovations to traditional online training. After the training program, the researchers analyzed faculty response to the training to improve design principles and delivery for future development of eLearning materials. While the impact of the innovations developed in this student success endeavor are still largely to be determined, preliminary results indicate that faculty find the professional development modules helpful and will be implementing them in their courses.

Keywords—student success rates; innovation; feedback; open educational resources; training transfer; social media

I. INTRODUCTION

This research project aims to increase student success in online courses offered in the Radow College of Humanities and Social Sciences at Kennesaw State University while at the same time being mindful of faculty workload and lack of time for faculty development and course redesign. The bulk of the paper describes phase one of the project, which was undertaken in spring 2021. Increasing student success [measured by decreases in DFWI (Drop, Fail, Withdraw, Incomplete) rates] is not only a moral imperative, it is also financially incentivized. The researchers first present the description of phase one of the project and the initial results from participating faculty. The paper concludes with descriptions of phases two and three, which will be undertaken in summer and fall of 2021.

II. OVERVIEW AND RATIONALE

In the United States, education is supported financially by a complicated combination of federal and state funding. In fact, state by state comparisons reveal huge differences in how much a state contributes to its higher education coffers.

Government funding of higher education has dropped substantially in recent decades [1]. For example, overall, higher education state funding per student dropped 27% from 2000-2014. State by state, the numbers vary widely. The state of Michigan cut funding by 53% overall during that time while North Dakota increased funding by 31%. Our own state of Georgia cut funding by 17% [2].

When cuts are substantial, the difference is made up in budget cuts at the institutional level (such as reduction in library holdings and elimination of staff and programs) and tuition increases, among other strategies. But, in the United States' political system, the same politicians who strive to cut funding to education also strive to claim that they keep taxes and other expenses low. Therefore, the state rarely allows public (that is, state funded) institutions to raise tuition to make up for these budget cuts.

With funding so tight, any opportunity to gain additional budget money to support faculty and students is highly prized, and competition is fierce if such opportunities are announced. Opportunity sometimes comes in the form of "student success dollars," which is funding that can be awarded for initiatives with the intent of bolstering student success. In this case, student success is defined as decreased DFWI and increased retention (the student stays in individual courses and in the university as a whole), progression (the student progresses through a degree program), and graduation (within a proscribed number of years). This definition is often abbreviated as RPG (Retention, Progression, and Graduation). While student success dollars are not tied directly to RPG, our Executive Director for Academic & Fiscal Operations at Kennesaw State University, Dr. Michael Rothlisberger, explained, "Student success dollars are a systemic example of tying resources to strategy" because meeting RPG targets is seen as "a moral imperative" [3].

In order to compete for these highly prized student success dollars, our college wants to stand ready with research-based support to facilitate faculty implementation of techniques that foster student success. But just as there is a balancing act that goes along with cutting state funding to higher education and also refusing to allow tuition to raise, so there is also a balancing act with innovating to improve student success and being mindful of innovations that might

challenge academic freedom or increase already strained faculty workloads.

III. STUDENT SUCCESS INNOVATIONS PROJECT

RCHSS (Radow College of Humanities and Social Sciences) is one of 11 colleges at Kennesaw State University. The RCHSS ODE (Office of Digital Education) offers an award winning “Build a Web Course Workshop” to faculty to support them in creating and teaching online courses using research-based best practices. In preparing to apply for student success funding, college administrators recently looked at the DFWI rates of online courses offered pre-pandemic. Surprisingly, it was determined that there was no significant difference in DFWI rates between classes where faculty had been trained to teach online using best practices versus online courses created and taught by faculty who had not received training.

Our administration theorized the lack of discernable difference may stem from that fact that the ODE delivers training focused on best practices in online and hybrid teaching and not specifically on student success. That is, the courses created by trained faculty may have been better designed because the faculty who created and taught them had been trained in research-based best practices, but the courses may not have specifically implemented student success strategies.

IV. PROBLEM, CONSIDERATIONS, RESEARCH PROJECT

Our Build a Web Course training program is peppered with student-success research from well-known experts like Sandra McGuire, Jessamyn Neuhaus, Flower Darby, Anya Kamenetz, Richard Arum and Josipa Roksa, which we couple with advice and examples of successful strategies employed by our own faculty. However, an informal survey of former workshop participants found that none of them remembered the workshop topics that addressed student success in online courses.

A. The Problem

We realized that we needed a more focused strategy to supply faculty with information regarding implementing strategies for student success in their own online courses. But we also realized the need to emphasize student success information within the existing training while adding minimal time and work for the faculty participants.

B. Considerations

We already had a wealth of student success strategies in the workshop. However, the information was provided along with information on research-based best practices in course design and technology tutorials to create course materials. Student success strategy information was not pulled out and highlighted or emphasized for faculty participants. Especially for faculty new to online teaching, we could see how workshop participants would prioritize “how do I create the class,” “how do I make it accessible to students who use

screen readers or who need captioning,” and “what software do I use to create course materials” over “how do I strategize for student success.” The faculty participants had finite time and energy to complete the training and create the course. But could we also call attention to student success strategies in hopes of encouraging faculty participants to add a few of those to their courses, as well?

C. Research Project

As mentioned earlier, the chief impetus of this research was to position the college to be ready to apply for and receive student success funding. Beyond that, we wanted to be able to demonstrate that we had identified a way to increase and support student success. And of course, the heart of our motivation was to assist our students in achieving their academic goals.

The researchers designed a three-phase research project. Phase 1 (ongoing) involves creating our student success content, sharing it with faculty, and following up with a survey to measure their intent to adopt student success strategies into their courses. In Phase 2, we will survey faculty who have taught their new courses to determine why they did or did not implement student success strategies. For those who have adopted student success strategies, we will seek additional feedback on the impact of adoption on their time and effort and their perceptions of the impact of the strategies on student success in their courses. In Phase 3, we will survey students in courses where student success strategies have been implemented to better understand student perceptions of the strategies and their utility.

To begin Phase 1, the researchers did three things: 1) pulled the research-based, student-success content out of the faculty training modules and put it in separate pieces in the training called Student Success Minutes. 2) Added an activity to each of the Student Success Minutes to support the faculty in remembering the content. 3) Surveyed faculty at the end of the training to see if they recall and plan to use the Student Success Minutes information (intent to transfer) [4]. The researchers decided that each Student Success Minutes segment had to be less than 10 minutes, including the activity, so as not to overburden the faculty with more training content. In this initial, pilot phase of the project, our goals were to create the segments and present them to the faculty participating in the spring 2021 “Build a Web Course Workshop” and then survey faculty participants, as described above, regarding intent to transfer. We started with a small number of faculty participants (8). Because of low faculty enrollments, in this first phase of the project we were able to gather little more than a handful of initial reactions.

Phase 1 will be continued by developing additional topics and offering the Student Success Minutes in “Build a Web Course” workshops in summer and fall 2021. In addition, a second, shorter, asynchronous training using the Student Success Minutes segments is being created. This training targets faculty who have completed the “Build a Web Course” Workshop previously but did not receive the

redesigned content on research-based strategies for student success. The redesigned training will take participants less than two hours to complete. It will be asynchronous and at participants' own pace. Currently, other workshops focusing on student success strategies at the institution take more time and/or lack the flexibility and interaction of our Student Success Minutes. The redesigned training and the accompanying survey of intent to transfer will be available during the second half of summer 2021.

During academic year 2021-2022, the researchers plan to move on to the additional phases in the project. In Phase 2, we would ask for volunteers from the workshop completers who would put at least one student success strategy from the workshop in their course. In Phase 3, we would survey students in the course to see if they noticed the strategy and if they found it to be helpful. While measuring DWFI rates might also be helpful, the researchers are cognizant that students drop courses for many reasons that may have nothing to do with the professor or the course content. Also, DWFI rates can be used against professors who might feel targeted by attention to such information. For this reason, we chose not to measure DWFI rates from participants in this research. At the end of the project, we will gather aggregate data on DWFI rates to see if the project had an impact on the college DWFI rates as a whole.

After the three phases of the project, the researchers plan to use the information gathered to assess whether highlighting student success strategies in faculty development training can encourage faculty to implement these strategies. And, if subsequently, that implementation leads to increases in student success and reduction in DWFI rates. If we find we have a successful strategy, we will be able to use this information to better position our college to receive student success funding when future opportunities arise.

V. RESEARCH-BASED MODULES ON STUDENT SUCCESS

In the first phase of this project, the research team created six, Student Success Minutes segments. This section will describe each segment, provide the research it is based on, and describe the activity provided with it and faculty participant results, if available.

A. Student Success Minutes 1: Scaffolding

This student success minutes segment was based on the work of Flower Darby (Figure 1). Darby explains scaffolding through her experience teaching jazz dance. She writes,

[B]eginning dancers get frustrated and demotivated if I constantly throw new things at them. Better to practice one new step for a while, get feedback from me on their progress, and build confidence and self-efficacy before introducing a slightly more complex step or one that requires greater skill" [5 p. 27].

Darby extrapolates this idea to other academic realms. While scaffolding in college classes is not a brand-new idea,

Darby provides an excellent explanation and rationale for the practice. For example, in a research paper assignment, instead of just assigning a 10-page research essay, ask students to turn in a topic early in the course. A few weeks later, ask students to turn in an annotated bibliography with a tentative thesis. And two weeks before the paper is due, ask students to turn in (or share on a discussion board) a PowerPoint with the title and thesis on slide 1 and the topic sentence and paragraph supporting points for each paragraph in the paper. Of course, the faculty member would be expected to provide timely and helpful feedback on each phase before the next phase is due.

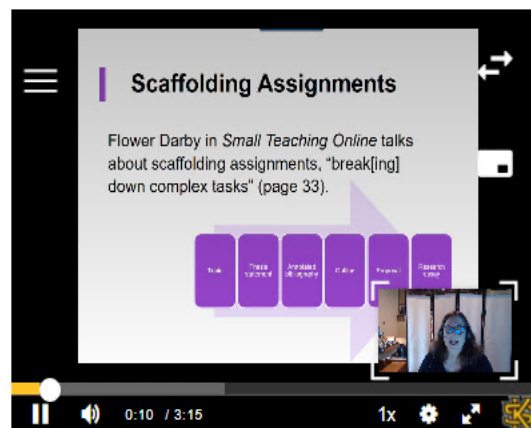


Figure 1. Student Success Minutes 1: a video explaining Flower Darby's approach to scaffolding.

To introduce (or remind) faculty of this student success strategy, in a three-minute video, Dr. Tamara Powell, Director of the RCHSS ODE, explained the concept of scaffolding and asked participants to share a reflection on when they might use the strategy to support student success in a class. In the reflection assignment, 100% of faculty participants indicated that they already used scaffolding strategies in their courses to some degree.

B. Student Success Minutes 2: GroupMe

The second student success minutes segment was based on a need within the institution. At Kennesaw State University, student culture results in the creation of a GroupMe (Figure 2) for each class in which students are enrolled—bypassing the professor [6]. GroupMe is a social media application that allows a group to chat via mobile app or website without exchanging personal information. On the one hand, GroupMe is excellent for creating community and support in an online course. On the other hand, some students with the best intentions have been tempted to use GroupMe to commit breaches of academic integrity.

In response to these problems, Mr. Sam Lee, a student at Kennesaw State University as well as a teaching assistant in the Spanish and French programs and an assistant instructional designer in the RCHSS ODE, created an interactive presentation using Articulate Storyline 360. The presentation walked faculty participants through an

overview of GroupMe and provided suggestions to faculty regarding how to minimize student cheating with it and how to use it with students to support student success [5, p. 80].



Figure 2. Student Success Minutes 2: a short, self-paced, interactive presentation on the social media tool GroupMe.

This presentation concluded with a short quiz to support comprehension of the main ideas. Faculty participants were allowed to attempt the quiz multiple times, and all faculty participants scored 100% on their final attempts.

C. Student Success Minutes 3: Open Educational Resources and Creative Commons

In the past five years, a great deal of research has been done on the impact of OERs (Open Educational Resources), or no-cost or low-cost course materials, upon student success efforts. In the United States, textbook prices have risen astronomically. In the last 10 years, the “average cost of college textbooks has risen four times faster than the rate of inflation,” and “65 percent of students . . . skip buying required texts” to save money or simply because they cannot afford them [7]. As an alternative to expensive textbooks, many faculty members turn to OERs. Research into OERs has shown that OERs increase student participation, satisfaction, learning, retention, and course and program completion. They reduce student debt not only by lowering textbook costs in individual classes, but also by allowing students to take more courses in a term, thereby graduating more quickly and accruing less student loan debt [8].

Ms. Tiffani (Reardon) Tijerina (Figure 3), the Program Director for the Affordable Learning Georgia initiative, created a Student Success Minutes segment on OERs for this project. In the two minute and 37 second video, Ms. Tijerina defines open educational resources and explains their benefits as well as Creative Commons licensing. The Creative Commons licensing explanation is provided to support understanding of the types of resources that can be used as OERs in classes.

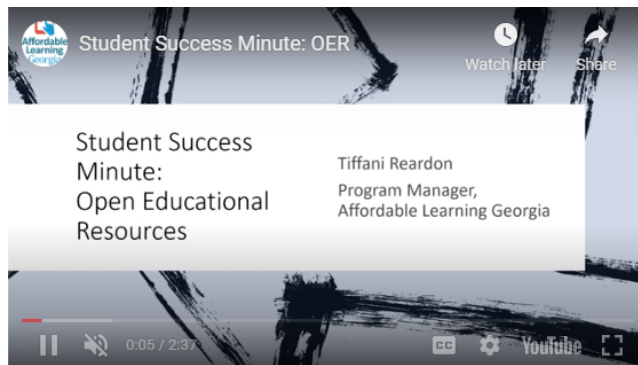


Figure 3. Student Success Minutes 3: a short video and quiz on Open Educational Resources.

Ms. Tijerina’s student success minutes segment concludes with an ungraded self-assessment on the terms and concepts presented in the segment and then a graded quiz on the same terms and concepts. Faculty participants were invited to practice with the ungraded self-assessment as much as desired before taking the graded quiz on the same information. Every faculty participant scored 100% on the graded quiz. Ungraded self-assessments [9] will be the topic of a future student success minutes segment.

D. Student Success Minutes 4: The Quick Write

Dr. Saundra McGuire recommends a reflection activity as part of a class to engage students and enhance self-esteem [10, p. 10]. It is hard to imagine that something so simple to implement can be such a powerful tool for student success. Mr. Stephen Bartlett, Associate Director of the ODE, created a short video on a type of reflection assignment called “The Quick Write” (figure 4). McGuire uses the Quick Write as a confidence booster. She asks students to remember a thing they learned that was hard and recall how they learned it [10, p.84]. Mr. Bartlett also recommends using it as a reflection assignment to help cement information students have learned in a class period and to “check in” on students regarding to their progress in the class.



Figure 4. Student Success Minutes 4: a short video on the power of reflection.

Asking students to take just one to three minutes to write about an aspect of the material that was just presented is a great way to support learning and engagement, and it also allows the professor to see whether students are paying attention or “getting the material” in an online class.

The reflection assignments, serving as low-stakes or no-stakes assignments in this case, help reduce stress and support student learning [5, p. 9] [11, p. 69]. In the faculty development training, this segment ended with a Quick Write activity. Faculty participants were asked, “Think for two minutes and write for three minutes. Please write at least two sentences. What is the most important outcome that you want students to achieve in your course, and how might quick writes help students toward this goal?” While each faculty participant responded differently, the key takeaway was that each professor wanted students to be able to think critically, and the professor believed the Quick Write assignment fostered that goal.

E. Student Success Minutes 5: Weekly Modules

Universal Design for Learning Theory states that consistency is a key component for supporting increased success as it lightens cognitive load, freeing up more time and mental energy to assist the student in learning the course content [12]. It is important to be consistent in scheduling expectations for students in online courses. Students are used to organizing their college schedules by weeks in face-to-face classes, and it makes sense to use that structure in online courses as well. It also makes sense to create folders, organized by weeks, with everything a student needs in that folder to complete that week of class.

When faculty instead create modules of random lengths (module 1 is three weeks, module 2 is four days, module 3 is seven weeks, etc.), students who already struggle with time management can suffer severely. When faculty create overly long modules (one 16-week course with only four, four-week-long modules), students who wait until the last minute find out four weeks into the course that they have fallen too far behind to succeed. Student Success Minutes 5: Weekly Modules (Figure 5) provides the rationale for organizing the online course in a weekly fashion and examples of why it is the easiest way to support student success in an online course.



Figure 5. Student Success Minutes 5: a short video on weekly modules.

Weekly organization of online classes supports student success by providing consistency, reducing cognitive load, and helping students to organize their time [13]. This segment, created by Dr. Tamara Powell, ended with a quiz over the material presented in the short (two minutes and 38 seconds) video. All faculty participants scored 100% on the quiz.

F. Student Success Minutes 6: Timely and Effective Feedback

A great deal of research on student success supports not only feedback, but timely and effective feedback [5, p. 44, p. 107], [11, p. 70]. For our last student success minutes segment in this pilot, Mr. Sam Lee created a website that included an interactive presentation on the importance of timely and effective feedback. As Darby points out, “It’s easy for online students to feel isolated and unsupported” [5, p. 44]. Feedback, even small notes about low or no stakes assignments, can motivate students to invest more time in the course. Such feedback can also alert students that they are not doing enough to succeed in the class—or are on the wrong track—long before they fail a high stakes assignment. In this way, timely and effective feedback promotes student success.

As the reader may remember, this project was inspired partly as a way to provide student success strategies to faculty who were already strapped for time. And as we know very well, suggesting faculty take time to provide more feedback is not a timesaver. However, in the age of technology, faculty can use the learning management system to “work smarter, not harder.”

Solutions that support student success and reduce faculty workload are not always possible, but in this case, the student success strategy was able to support both positive outcomes.

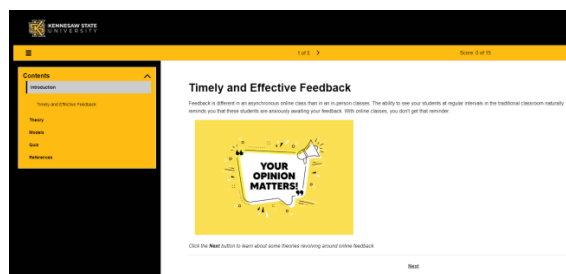


Figure 6. Student Success Minutes 6: a website with interactive exercises and a quiz that provide information about the importance of timely and effective feedback.

This module included the interactive presentation, mentioned above, along with a practice quiz that allowed participants to check their understanding of the material. After the practice quiz, participants took a graded quiz with the same questions. The quiz was worth 20 points, total, and the average grade was 75%. This information suggests that the presentation on timely and effective feedback needs adjustment to increase participant retention of the information. In the next offering of the workshop, this

segment will include more engaging activities to support active learning.

VI. CONCLUSION

The summaries of each segment show that faculty participants did engage with the materials—although they were less successful with the material presented in module 6. At the time of this writing, four faculty members had completed the survey regarding intent to transfer. (The survey is anonymous.) The faculty members did remember all of the Student Success Minutes and liked segments 2, 5, and 6 (GroupMe, weekly modules, and feedback) the best. All faculty members indicated that they will implement at least one of the strategies in the course they are building. When asked if these segments should be included in future trainings, three of the respondents answered “yes.” The fourth observed “It would depend on that person’s level of familiarity with the pedagogy.” Even respondents with previous training made comments such as “This was good—well put-together. Thanks! It added a few small changes that I think will have big effects to my class, so it was worth the time.”

Two additional segments are planned-- the power of ungraded self-assessments and engaging discussions--for a total of eight. RCHSS ODE will offer subsequent trainings and collect more data. Additionally, the segments will be separated out and offered as an online, asynchronous faculty training on student success, and participants will be surveyed in those trainings as well. Finally, in the fall 2021, two faculty have offered to incorporate at least one strategy in classes and to survey students regarding responses to the innovation. Additionally, we hope to recruit workshop participants to do the same and share survey results.

Our goal is to have a set of strategies all faculty can easily incorporate into their courses to support student success and gather data showing positive results so that we can have strong, research-based arguments in our funding proposals that increase our chances of earning student success funding. Preliminary results indicate that faculty find the Student Success Minutes helpful and will be implementing them in their courses.

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